

ABSTRACT OF DISCLOSURE

A method of replicating multicast datagrams in a network device is disclosed. The method includes the steps of determining by a memory management unit whether a scheduled outgoing datagram stored in a main memory is a multicast (MC) packet. When the scheduled outgoing datagram type is the MC datagram, the method also includes performing a lookup of a replicate count table to determine a copy count value and writing the copy count value to a copy count register, awaiting a ready signal from an egress port of the network switch and sending the outgoing datagram to the egress port from the main memory along with the copy count value. The method also includes changing the copy count value in the copy count register, modifying a VLAN identifier of the outgoing datagram if necessary based on the copy count value and forwarding the outgoing datagram from the egress port.